

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Parent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Bon. 1450
Alexandria, Virginia 22313-1450
www.usptogov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,244	02/27/2004	Peter Byrne	MSFT-2944/307243.01	8978
41505 75	590 12/01/2006		EXAMINER	
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)			ORTIZ, BELIX M	
CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET			ART UNIT	PAPER NUMBER
	IIA, PA 19104-2891		2164	
		•	DATE MAILED: 12/01/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

-	 	Application No.	Applicant(s)			
Office Action Summary		10/789,244	BYRNE, PETER			
		Examiner	Art Unit			
		Belix M. Ortiz	2164			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SH WHIC - Exter after - If NO - Failu Any I	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Properties of the provision of the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	1. sely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
 Responsive to communication(s) filed on 31 August 2006. This action is FINAL. 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. 						
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdrav Claim(s) is/are allowed. Claim(s) 1-17 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.				
Applicati	on Papers					
10)□	The specification is objected to by the Examine The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119					
12)[a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau see the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive (PCT Rule 17.2(a)).	on No ed in this National Stage			
2) 🔲 Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da	ite			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application 6) Other:						

DETAILED ACTION

Remarks

1. In response to communications files on 31-August-2006. Therefore, claims 1-17 are presently pending in the application.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-17 are rejected under 35 U.S.C. 103(a) (Eff. Filing date of application: 2/27/2004) as being unpatentable over <u>Burke</u> (U.S. patent 6,185,663) (Eff. Filing date of application: 6/15/1998) view of <u>Courter et al.</u> (U.S. patent 6,119,128) (Eff. Filing date of application 3/30/1998).

As to claims 1 and 12, <u>Burke</u> teaches a method of generating recoverable units in a database (see abstract and column 4, lines 26-28), the method comprising:

partitioning the database into a first and a second unit (see figure 1); creating multiple logs such that any one unit is associated with only one log (see column 2, lines 2-5; column 2, lines 14-16; and column 4, lines 17-22); and

linking the primary catalog to the secondary catalogs (see figure 1).

Burke does not teach creating a primary catalog comprising metadata of logical elements of the units, the primary catalog referencing the units;

creating two secondary catalogs, each secondary catalog corresponding to a respective unit and comprising metadata of physical elements for the respective unit; and maintaining the secondary catalogs such that the first unit is recoverable independently from the second unit.

Courter et al. teaches recovering different types of objects with one pass of the log (see abstract), in which he teaches creating a primary catalog comprising metadata of logical elements of the units, the primary catalog referencing the units (see column 1, lines 64-66);

creating two secondary catalogs, each secondary catalog corresponding to a respective unit and comprising metadata of physical elements for the respective unit (see column 1, lines 66-67 and column 2, line 1);

maintaining the secondary catalogs such that the first unit is recoverable independently from the second unit (see column 4, lines 57-60).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Burke</u> by the teaching of <u>Courter et al.</u>, because creating a primary catalog comprising metadata of logical elements of the units, the primary catalog referencing the units;

creating two secondary catalogs, each secondary catalog corresponding to a respective unit and comprising metadata of physical elements for the respective unit;

maintaining the secondary catalogs such that the first unit is recoverable independently from the second unit, would enable the method because, "manufacture for a

computer implemented recovery system for restoring a database in a computer. The database contains objects and is stored on a primary data storage device connected to the computer.

Objects of different types in the database are copied from the primary data storage device to a secondary data storage device. Modifications to the objects are logged in a log file. A recovery indicator is received that indicates that recovery of the objects in the database is required", (see abstract).

As to claims 2, 8 and 13, <u>Burke</u> as modified teaches wherein creating two secondary catalogs further comprises creating two secondary catalogs wherein each catalog includes a log stream corresponding to the respective unit (see <u>Burke</u>, figure 1, character 11, 12, and 16).

As to claims 3, 9 and 14, <u>Burke</u> as modified teaches wherein linking further comprises linking the primary catalog to the secondary catalog such that a first unit is recoverable independently from the second unit while the second unit is being accessed (see <u>Burke</u>, figure 1; column 2, lines 57-67; and column 4, lines 49-56).

As to claims 4 and 15, <u>Burke</u> as modified teaches wherein creating a primary catalog comprises creating a catalog which contains metadata for at least one of the database, tables, indexes, data types, constraints, stored procedures, triggers, and file groups (see <u>Courter et al.</u>, column 2, lines 9-13).

As to claims 5 and 16, <u>Burke</u> as modified teaches wherein creating two secondary catalogs comprises creating catalogs which contain metadata for at least one of pages, files, B-Trees, heaps, and log data (see <u>Courter et al.</u>, column 1, lines 24-25).

As to claims 6, 10-11, and 17, <u>Burke</u> as modified teaches wherein maintaining comprises separately logging updates to the respective units in the respective secondary catalogs (see <u>Burke</u>, figure 1; column 2, lines 14-16; and column 3, lines 57-58).

As to claim 7, <u>Burke</u> teaches a system having a database (see abstract), the system comprising:

a processor having access to memory, the memory having instructions which, when executed (see column 1, lines 29-40 and claim 24), perform the method comprising:

partitioning the database into a first and a second unit (see figure 1);

creating multiple logs such that any one unit is associated with only one log (see column 2, lines 2-5; column 2, lines 14-16; and column 4, lines 17-22);

linking the primary catalog to the secondary catalogs (see figure 1); and

Burke does not teach creating a primary catalog comprising metadata of logical elements of the units, the primary catalog referencing the units;

creating two secondary catalogs, each secondary catalog corresponding to a respective unit and comprising metadata of physical elements for the respective unit; and maintaining the secondary catalogs such that the first unit is recoverable independently from the second unit.

Courter et al. teaches recovering different types of objects with one pass of the log (see abstract), in which he teaches creating a primary catalog comprising metadata of logical elements of the units, the primary catalog referencing the units (see column 1, lines 64-66);

creating two secondary catalogs, each secondary catalog corresponding to a respective unit and comprising metadata of physical elements for the respective unit (see column 1, lines 66-67 and column 2, line 1);

maintaining the secondary catalogs such that the first unit is recoverable independently from the second unit (see column 4, lines 57-60).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Burke</u> by the teaching of <u>Courter et al.</u>, because creating a primary catalog comprising metadata of logical elements of the units, the primary catalog referencing the units;

creating two secondary catalogs, each secondary catalog corresponding to a respective unit and comprising metadata of physical elements for the respective unit;

maintaining the secondary catalogs such that the first unit is recoverable independently from the second unit, would enable the method because, "manufacture for a computer implemented recovery system for restoring a database in a computer. The database contains objects and is stored on a primary data storage device connected to the computer. Objects of different types in the database are copied from the primary data storage device to a secondary data storage device. Modifications to the objects are logged in a log file. A recovery indicator is received that indicates that recovery of the objects in the database is required", (see abstract).

Application/Control Number: 10/789,244

Art Unit: 2164

Page 7

Response to Arguments

4. Applicant's arguments filed 31-August-2006 with respect to the rejected claims in view of the cited references have been fully considered but they are not found persuasive:

In response to applicants' arguments that "Burke does not teach a partitioning database into two recovery unit, a primary and secondary catalog", the arguments have been fully considered but are not deemed persuasive, because Courter et al. in view on the description of the primary and second catalog on claims 4 and 5 Courter et al teaches a catalog with table and index and another catalos with files and pages. Courter et al. teaches "manufacture for a computer implemented recovery system for restoring a database in a computer. The database contains objects and is stored on a primary data storage device connected to the computer. Objects of different types in the database are copied from the primary data storage device to a secondary data storage device. Modifications to the objects are logged in a log file. A recovery indicator is received that indicates that recovery of the objects in the database is required".

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Belix M. Ortiz whose telephone number is 571-272-4081. The examiner can normally be reached on moday-friday 9am-5pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bmo

November 25, 2006.

SAM RIMELL PRIMARY EXAMINER